SONY

3-754-116-21 (1)

Compact Disc Player

Operating Instructions

CDP-X779ES

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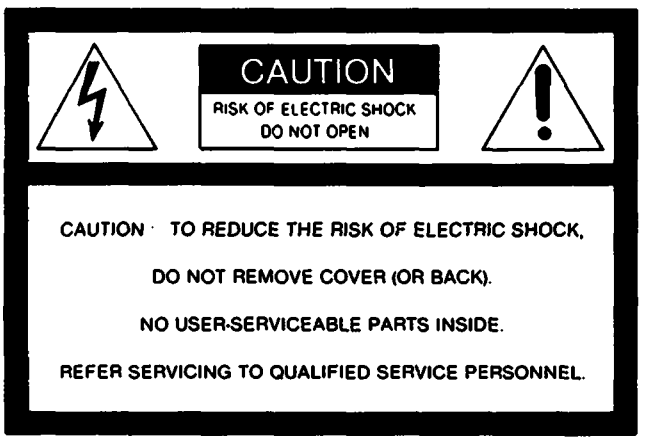
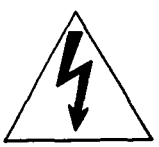
Warning

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION · TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Owner's Record

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CDP-X779ES Serial No. _____

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Overview

Enjoy listening in various playing modes
You can select playing modes among the following:
Continuous play (page 12) – The entire disc is played once.
Shuffle play (page 15) – Selections are played in a random order.
Delete play (page 16) – Selections of your choice are played in the order you desire.
Repeat play (page 17) – Selections or portions are played repeatedly.
Program play (page 18) – Selections are played in your desired order.

Editing your own tapes
- You can fade in or out the play when making your own tape recording. – Fade in/Fade out (page 20)
- CUSTOM EDIT function
  - You can program a pause separately on side A and B. – Pause program (page 21)
  - You can confirm the total playing time while choosing the selections to be programmed. – Program edit (page 21)
  - The loudest portion of the disc will be determined and played repeatedly. – Peak search (page 23)

Making your disc custom-made – CUSTOM FILE function
- You can store the programmed playing order for a disc. – Program bank (page 25)
- You can keep your undesired selections in memory – Delete bank (page 26)
- You can assign your own index point to any desired position on a disc. – Custom index (page 27)

Easy-to-see display
The selection number, the playing time, the remaining time are displayed by pressing the TIME button.
In addition, you can change the desired display information by selecting three patterns. Adjusting the brightness of the display by selecting three patterns. (page 13)

Precautions

On safety

- Operate the player only on 120 V AC, 60 Hz.
- Should any solid or liquid object enter the cabinet, unplug the player and have it checked by qualified personnel before operating it any further.
- Unplug the player from the wall outlet if it is not to be used for an extended period of time.
  To disconnect a cord, pull it out by the plug. Never pull the cord itself.
- Do not disassemble the cabinet. The laser beam used in this player is harmful to the eyes when uncovered. Refer servicing to qualified personnel only.

On operation

- Remove the disc from the tray after playing it, if the player will not be used for any length of time. Do not transport the player with a disc in place.
- When the disc tray is in the open position, do not press down on it strongly, or place heavy objects on it.
- Do not turn up the volume while listening to a portion with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level portion is played.

On disc tray

- If the disc tray does not close properly and slides out again, reinsert the disc.
- Be careful not to pinch your fingers between the tray and the player.
- Always keep the tray closed when not using the player to keep dust or dirt from entering the optical system of the player.
- If the player does not operate, press the ⏏ OPEN/CLOSE button and reinsert the disc.
- Insert only one disc at a time.
- Make sure the disc is placed properly in the tray. Incorrect positioning may result in permanent damage to the disc.

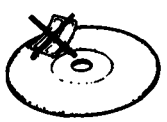
On moisture condensation

If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the player. Should this occur, the player will not operate. In this case, remove the disc and leave the player turned on for about an hour until the moisture evaporates.

Notes on handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.

- Do not stick paper or tape on the disc.



- Do not expose the disc to direct sulight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as there can be a considerable rise in the temperature.
- After playing, store the disc in its case.

If you have any questions or problems concerning your player, please contact your nearest Sony dealer.

Customer for the U.S.A.

For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS".

Unpacking

Choosing a Good Location

- Place the player in a location with adequate air circulation to prevent internal heat build up in the player.
- Do not place the player on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not install the player:
  - near heat sources such as radiators or air ducts.
  - in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

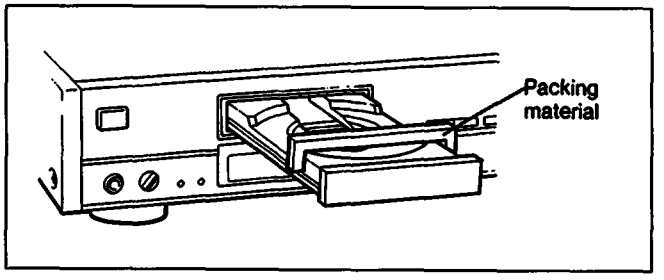
Checking the Supplied Accessories

Make sure that all supplied accessories are included with your player. This manual and the following items are included with your CDP-X779ES.

- Audio connecting cords (1)
- Wireless remote commander RM-D995 (1)
- Sony SUM-3(NS) batteries (2)
- Screws (M4) (8)

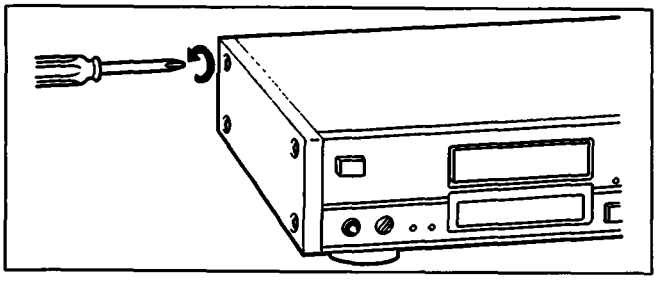
Note on Packing Material

Before playing this player for the first time, be sure to remove the packing material from the tray.



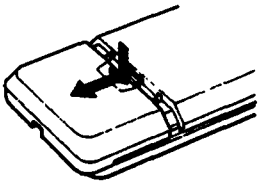
Detaching the Side Panels

For a model with detachable side panels
After removing the screws, secure the cabinet with the supplied lock screws (M4 × 8). Do not use the longer screws. For safety, before doing this, be sure to disconnect the AC power cord from the AC outlet.

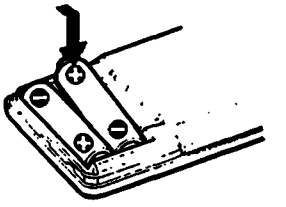


Inserting the Batteries into the Remote Commander

1 **Open the cover.**



2 **Insert two size AA(R6) batteries with correct polarity.**



Battery life

- About half a year of normal operation can be expected when using the Sony SUM-3(NS) batteries.
- When the batteries are run down, the remote commander will not operate the player. In this case, replace both batteries with new ones.

Notes on the remote control operation

- Avoid exposing the remote sensor to direct sunlight or lighting apparatus. Such exposure can cause a malfunction.
- To avoid damage caused by battery leakage and corrosion, remove the batteries when the commander will not be used for a long time.

Conventions

This symbol shown in the manual headings indicated a function operated only on the main player.

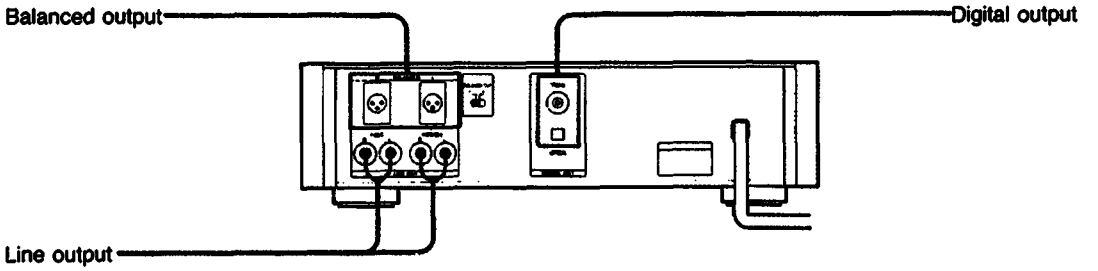
Hooking Up the System

You can connect the player with analog or digital signal depending on your amplifier or D/A converter. This player has the 3 types of analog outputs and the 2 types of digital outputs.

Before you begin, remember the following;

- Turn off the power of each unit before making connections.
- Connect the AC power cord last.
- Be sure to insert the plugs firmly into the jacks. Loose connection may cause hum and noise.
- Leave a little slack in the connecting cord to allow for inadvertent shock or vibration.
- Cord plugs and jacks are color coded: Red plugs and jacks are for the right channel (R) and white ones for the left channel (L).

Before Making Connections



Balanced output

As it is hardly affected by external noise, the balanced output connector is utilized by professionals in studios and the broadcasting stations. Connect the unit to an amplifier having a balanced input jack. For the connection, use cannon connectors XLR-3-32 or equivalent.
Pin assignment of the connectors are as follows; 1: GND, 2: COLD, 3: HOT.

Digital output

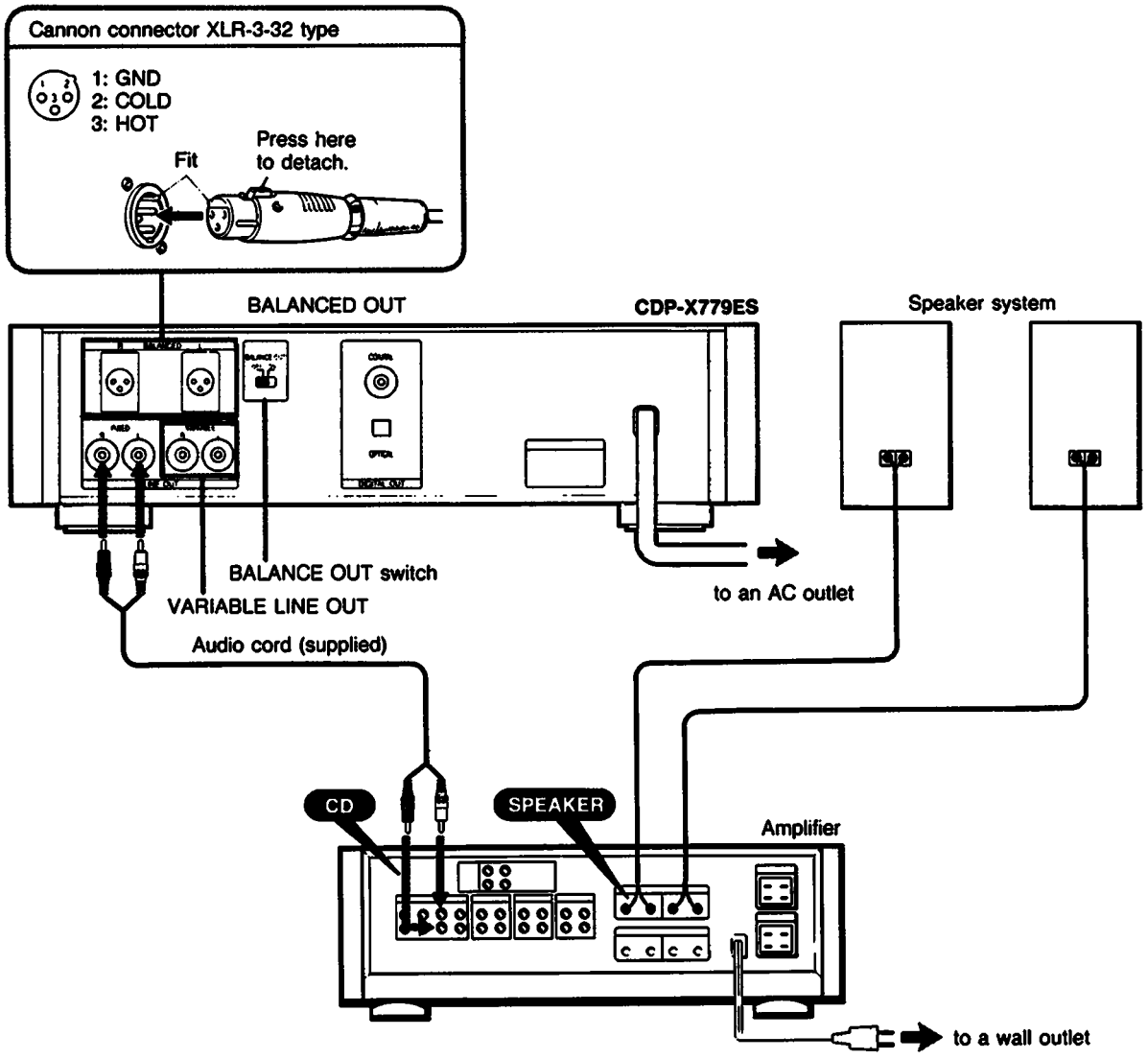
The music signal remains in digital form when transmitted for virtually no signal deterioration. Use the digital output connection when you connect the unit to an amplifier with a digital input or D/A converter.
When you connect a unit using a coaxial digital connecting cord, use the digital connecting cord VMC-1ES (not supplied). When you connect using optical digital connecting cord, use the audio optical cable POC-15 (not supplied).

Line output

Use the line output jacks when connecting this unit for analog use.
Normally make the connection to the FIXED jack. If you use the VARIABLE jack to connect a power amplifier, you can adjust the volume with the LINE OUT/PHONE LEVEL control on the player or LINE OUT LEVEL +/– buttons on the remote commander. The LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/– buttons on the remote commander) not only adjusts the headphones output but also the output level of the VARIABLE LINE OUT jack. Accordingly, you can make the level of this unit correspond to that of other music sources. Be careful when recording as the recording level will change when you use the LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/– buttons on the remote commander).

Hooking Up the System

Connecting the Player with Analog Equipment

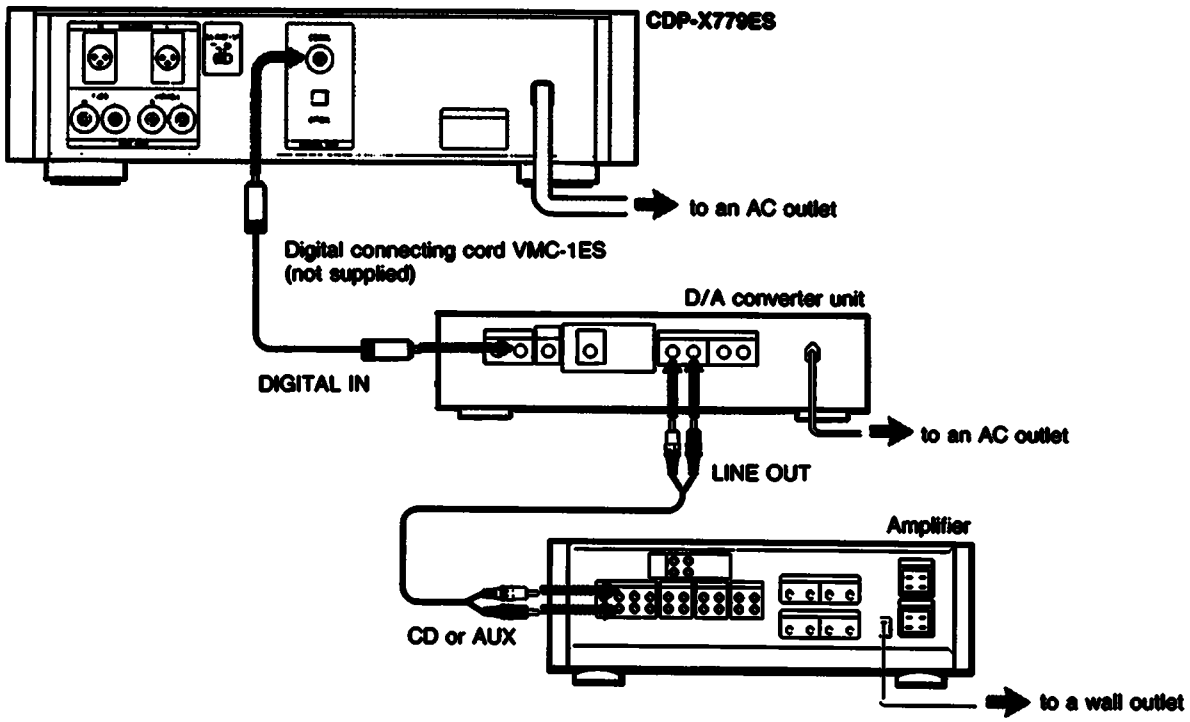


After Making Connection

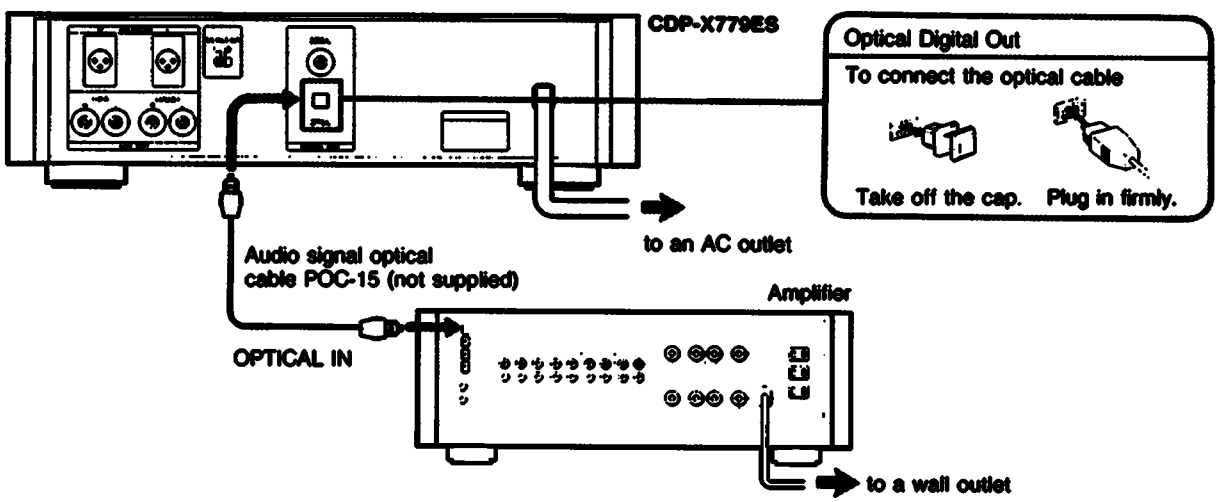
- Turn the power switch on.
  When you do not use the digital output, turn the DIGITAL OUT switch to OFF (OFF indicator lights up.).
  The analog output remains on regardless of whether the digital output is on or off.

- When you use BALANCED output, turn the BALANCE OUT switch to ON. When you don't use it, the BALANCE OUT switch should be turned to OFF.

Connecting the Player with Digital Equipment—Coaxial Digital Out

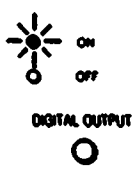


Connecting the Player with Digital Equipment—Optical Digital Out



After Making Connection

- Turn the power switch on.
  Press DIGITAL OUTPUT on the front panel of the player to light the ON indicator. The digital output is on, and the analog output still remains on.

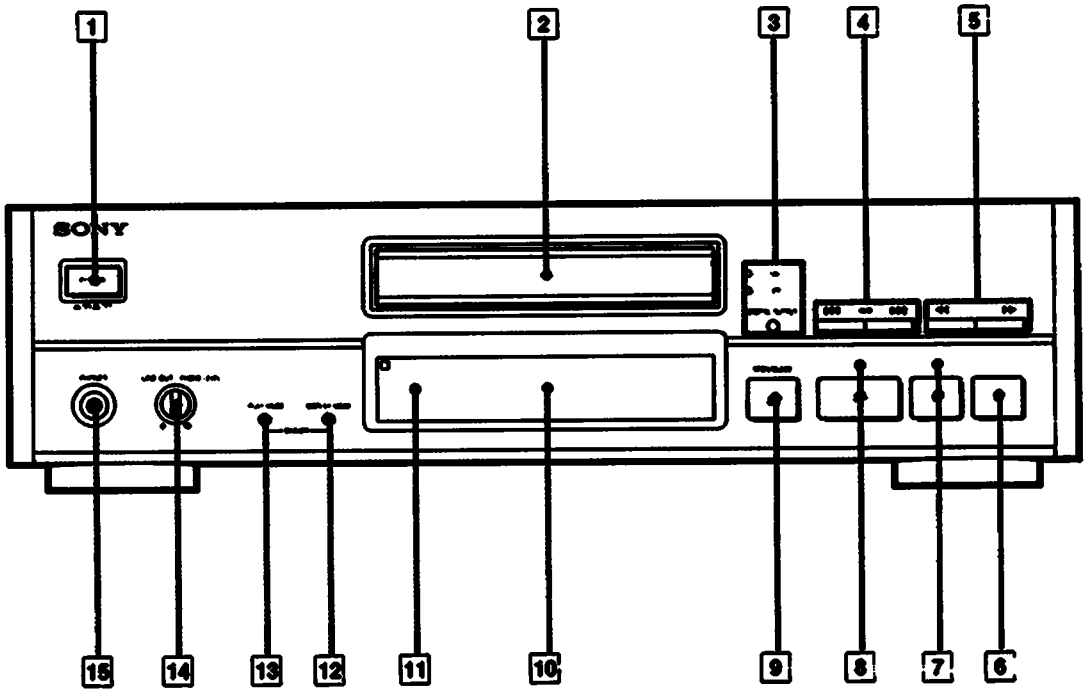


When connecting to the digital output

You cannot use the fade in/fade out function (page 20).

Identifying the Parts

Front Panel

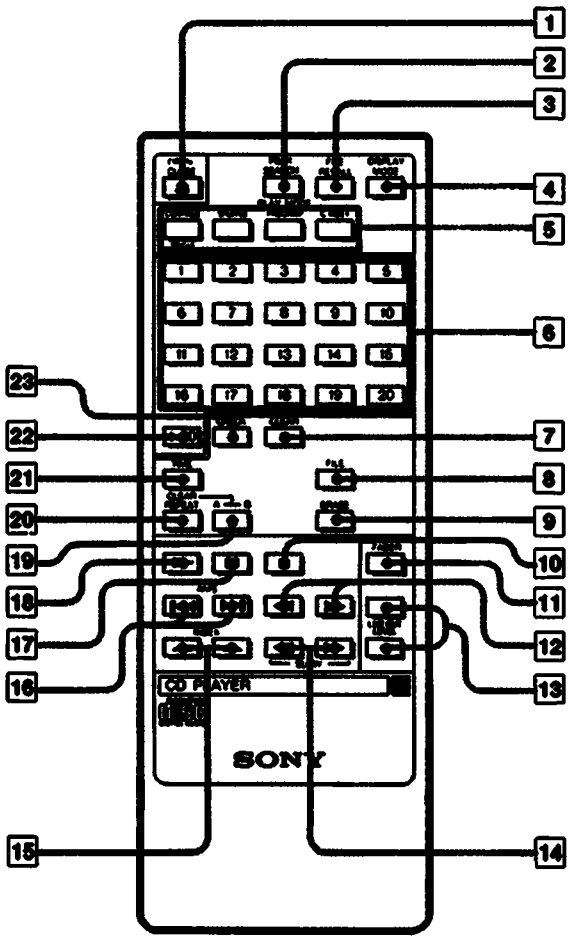


Refer to the pages indicated in ( ) for details.

1 POWER switch (page 12)
2 Disc tray
3 DIGITAL OUTPUT button and indicators (pages 8 and 9)
4 ⏮ ⏭ AMS* buttons (pages 14 and 21)
5 ◀◀ ▶▶ (manual search) buttons (pages 14 and 20)
6 ■ (stop) button (page 12)
7 ⏸ (pause) button and indicator (page 12)
8 ▶ (play) button and indicator (page 12)
9 ⏏ OPEN/CLOSE button (page 12)
10 Display window (page 13)
11 Remote sensor
12 DISPLAY MODE button (page 13)
13 PLAY MODE button (pgae 12)
14 LINE OUT/PHONE LEVEL control (pages 7 and 12)
15 PHONES jack

* AMS is the abbreviation of Automatic Music Sensor.

Remote Commander



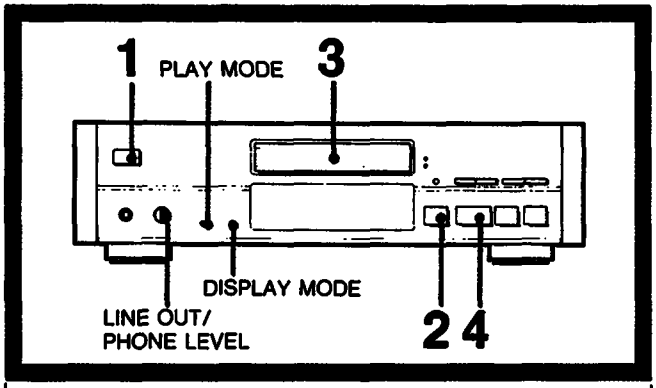
Refer to the pages indicated in ( ) for details.

1. ⏏ OPEN/CLOSE button (page 12)
2. PEAK SEARCH button (page 23)
3. FILE RECALL button (pages 25 and 26)
4. DISPLAY MODE button (page 13)
5. PLAY MODE buttons
   CONTINUE button (page 12)
   SHUFFLE button (pages 15 and 16)
   PROGRAM button (pages 18 and 21)
   C (custom). INDEX button (page 27)
6. Numeric buttons (page 14)
7. CLEAR button (pages 15, 16 and 18)
8. FILE (custom file) button (page 25, 26 and 27)
9. ERASE button (pages 25, 26 and 28)
10. ■ (stop) button (page 12)
11. FADER (fade in/fade out) button (page 20)
12. ◀◀ ▶▶ (manual search) button (pages 14 and 20)
13. LINE OUT LEVEL (line out/headphone level) buttons (pages 7 and 12)
14. ◀◀ ▶▶ SLOW (low speed manual search) buttons (page 14)
15. ← → INDEX buttons (pages 14 and 28)
16. ⏮ ⏭ AMS buttons (pages 14 and 21)
17. ⏸ (pause) button (page 12)
18. ▶ (play) button (page 12)
19. A ↔ B repeat button (page 17)
20. REPEAT button (repeat/A ↔ B repeat clear) button (page 17)
21. TIME button (page 13)
22. >20 (over 20) button (page 14)
23. CHECK button (pages 18, 22 and 28)

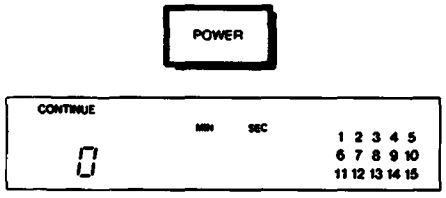
Playing a Disc – Continuous Play

In the continuous play mode, you can play the first selection or desired selection on your disc.
Before playing a disc, turn on the amplifier and set the input selector to the CD player position.

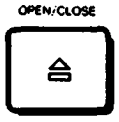
Playing the First Selection



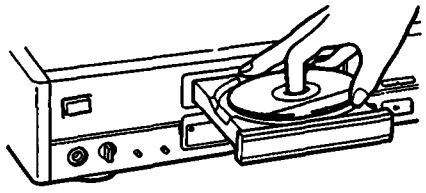
1 **Press POWER.**
If "CONTINUE" does not appear in the window, press CONTINUE on the remote commander. When using the PLAY MODE button on the player, press it until "CONTINUE" appears.



2 **Press ⏏.**

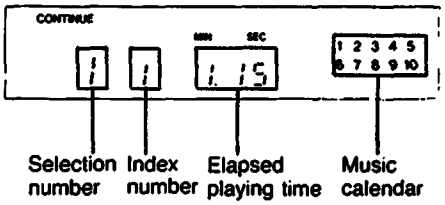


3 **Place a disc with the printed side up on the tray.**



4 **Press ►.**

The disc tray closes to start playing the first selection.



To stop play
To stop for a moment during play, press ❚❚.
Press ❚❚ or ► to resume play.
To stop play, press ■.
To stop play and open the tray, press ⏏.

When listening with headphones
Connect the headphones and adjust the volume with LINE OUT/PHONE LEVEL or LINE OUT LEVEL of the remote commander.

To play a 8 cm (3-inch) CD
Place it on the inner circle of the tray. If the disc is provided with an adaptor, first remove it. Do not put a normal CD (12 cm/5-inch) on top of a 8 cm CD.

To wake up to your favorite music (Timer play)
Leave a disc in the player before you turn the power off. When you turn the power back on, the player will automatically play the disc according to conditions before the power was turned off. You can also play a program of selections by making a program bank. (see page 25.)
By connecting a commercially available timer, you can have the player wake you up to your favorite music.

Notes on Output
- When you use the digital output, confirm the DIGITAL OUT indicator lamp is lighting on the side ON (see page 9).
- When you use BALANCED output, turn the BALANCE OUT switch ON. (See page 8.)

To control volume
When you make the connection to the VARIABLE side for analog use
You can control the volume with the LINE OUT/PHONE LEVEL control on the player or LINE OUT LEVEL +/– buttons on the remote commander. Press + of the remote commander to turn up the volume and press – to turn down the volume. When you press + or –, LINE OUT/PHONE LEVEL of the player rotates automatically. When you make the connection to FIXED, BALANCED or DIGITAL out, you cannot control it.

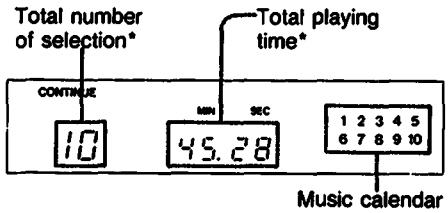
Information Display

Checking the total number of selections and total play time

There are two ways.

a) Place your disc on the tray and then either press ⏏ to automatically close the tray or manually close it.

b) Press TIME on the remote commander during stop.



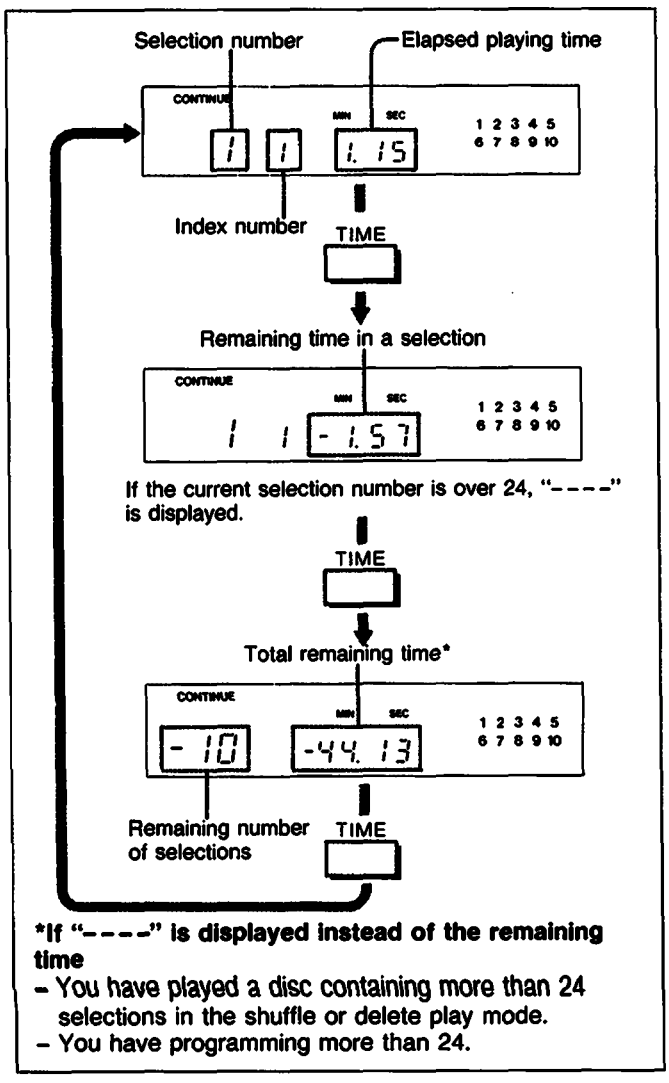
* The total number of selections and total playing time is displayed for a few seconds.

If a disc contains more than 15 selections,

▶ appears in the display window behind 15 on the music calendar.

Checking the remaining playing time

Each time you press TIME on the remote commander during play, the display changes to give you the following information.



***If "----" is displayed instead of the remaining time**

- You have played a disc containing more than 24 selections in the shuffle or delete play mode.
- You have programming more than 24.

To change the parts of information display

Each time you press DISPLAY MODE during play, the display changes to give you the following information.

Entire display appears. ←
↓
Track number, index number and playing time appear.
↓
Entire display disappears. ←

Even if all the informations are not displayed in the window, when you proceed to any operations, the current information appears for about 1 second.

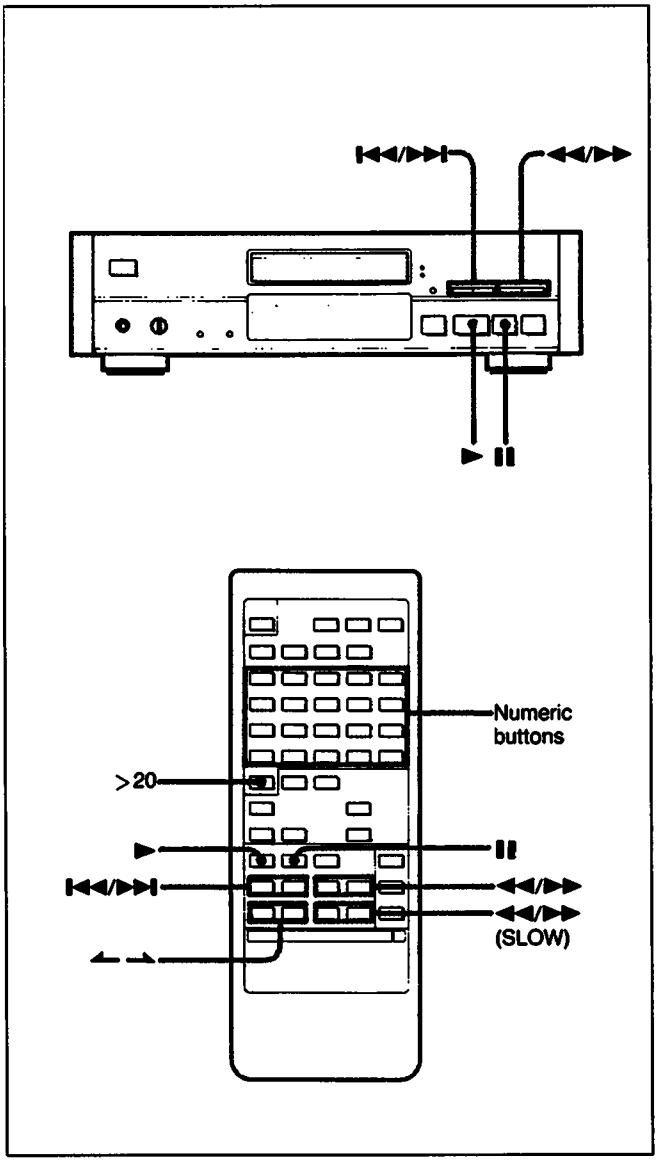
To adjust the brightness of the display – DIMMER function

Press DISPLAY MODE while holding down on PLAY MODE. The brightness adjustment has three tones. The tone you select will be stored in memory so that you do not have to adjust it again after turning the power off. After setting the dimmer function, select a playing mode using the PLAY MODE button.

Note

The time display mode selected with the TIME button will not change until the power is turned off.

Playing a Disc - Continuous Play



Locating a Particular Selection

You can locate the beginning of a desired selection during play or pause. There are two ways.

a) To locate sequentially

To locate the beginning of the current or preceding selection

- Press ⏮ as many times as required.
- Keep ⏮ pressed to skip selections.

To locate the beginning of the succeeding selection

- Press ⏭ as many times as required.
- Keep ⏭ pressed to skip selections.

When you press ⏮ during play
The player locates the beginning of the selection.

b) To locate directly

Press one of the numeric buttons ([1] to [20]) to enter the desired selection number.
If a selection number is greater than 20, use the [>20] and [1] to [10] buttons. [10] functions as the figure 0.
e.g. To play from selection No. 22, press [>20] [2] [2].
To play from selection No. 30, press [>20] [3] [10].

Locating a Particular Point in a Selection

There are two ways to locate a particular point you want.

a) To search quickly while monitoring the sound

Keep ◀◀ or ▶▶ pressed during play and release at the desired point.

b) To search using an index

You can use this function only with a disc on which index numbers are recorded.
Press ⏮ or ⏭ on the remote commander to locate the desired index number during play or in the pause mode.
The selected index number appears in the display window.

To search quickly by observing the display

Press ⏸, then keep ◀◀ or ▶▶ pressed. The search speed will increase, but there will be no sound. Find the desired point by observing the display.
Press ⏸ or ▶ again at the desired point.

To search slowly while monitoring the sound

Press ◀◀/▶▶ SLOW during play and release at the desired point.

" ⁻'⁻' " is displayed

If you continuously press ▶▶ at the end of the disc, " ⁻'⁻' " appears in the window. Press ◀◀ or ⏮ to turn the normal indication.
If you continuously press ◀◀ at the beginning of the disc, play begins automatically from the first selection.

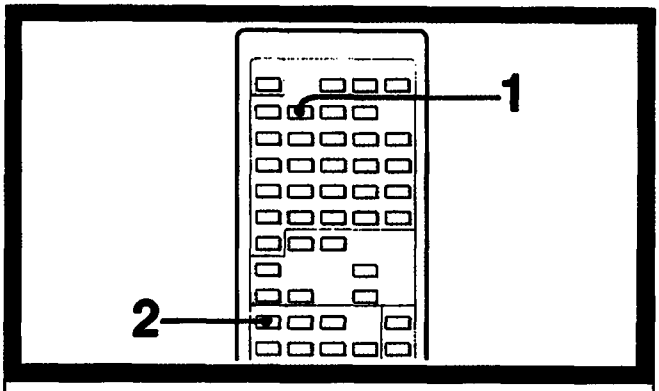
What is an index?

This is a number assigned to a section of a selection (for example, to a movement in a symphony) to allow that section to be located easily.

Playing in a Random Order – Shuffle Play

Shuffle play: Allows you to play all (up to 99) selections on your disc once each in a random order.
Delete shuffle play: Allows you to delete all undesired selections on your disc and play only desired ones.

Shuffle Play



1 Press SHUFFLE.
"SHUFFLE" appears in the window.
When using the PLAY MODE button on the player, press it until "SHUFFLE" appears.

2 Press ►.

The indicator above the ► button lights up and then shuffle play starts.

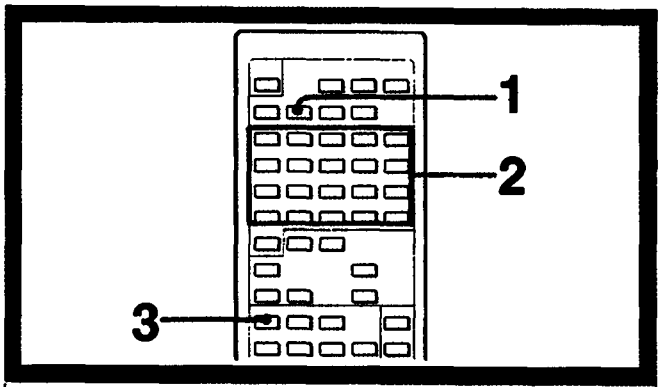
To cancel the shuffle play
Press CONTINUE and return to the continuous playing mode.

To check the remaining time
Press TIME on the remote commander once to see the remaining time of the selection being played; twice to see the total remaining time; once more to return to the initial display.

If you press SHUFFLE during play
Shuffle play begins from the current selection.

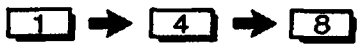
What is this indication?
This indication appears while the player is "shuffling" the selections.

Delete Shuffle Play



1 Press SHUFFLE.

2 Press the numeric button(s) of undesired selection number to be deleted.



The number disappears.

To put back a selection which you have deleted, press the numeric button for that selection.
"On" will be displayed in the window.

3 Press ►.

Delete shuffle play starts.

To put back all selections which you have deleted
Press ■ during stop.

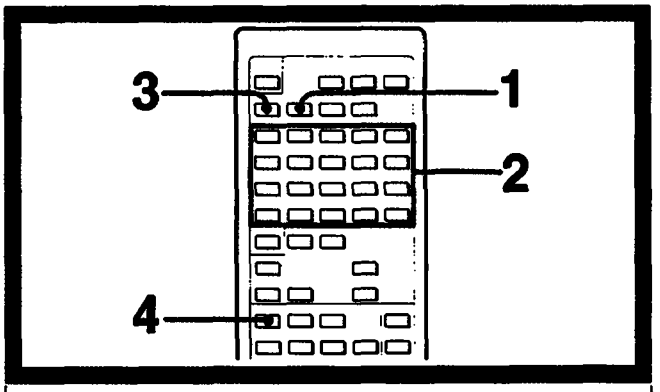
To delete a selection during play
Press the numeric button for that selection.
"OFF" will appear in the display. You can also delete a selection being played by pressing the CLEAR button.

Delete bank function
You can keep the desired selections in memory for each disc by using the delete bank function. (page 26)

Playing Only the Desired Selections - Delete Play

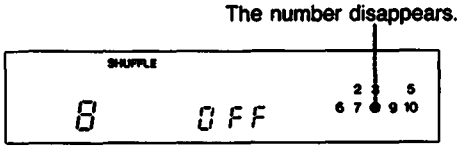
Delete play allows you to delete all undesired selections on your disc and play only desired ones. The player will skip the undesired selections and play the desired ones in the ascending order of their selection number. In the delete play mode, therefore, you can play only the desired selections continuously.

To Delete the Undesired Selection Before Playing



1 **Press SHUFFLE.**
"SHUFFLE" appears in the window.
When using the PLAY MODE button on the player, press it until "SHUFFLE" appears.

2 **Press the numeric button(s) of undesired selection number (to be deleted).**

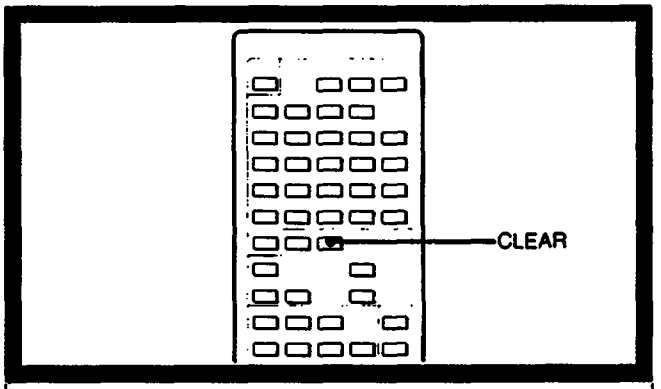


To put back a selection which you have deleted, press the numeric button for that selection. "On" will be displayed in the window.

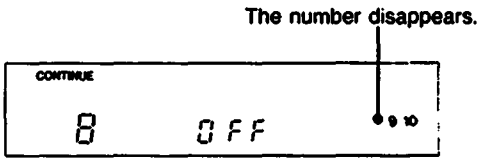
3 **Press CONTINUE.**
"CONTINUE" appears in the window.

4 **Press ►.**
The indicator above the ► button lights up on the player, and then delete play starts.

To Delete a Selection During Play



When playing the beginning of an undesired selection, press CLEAR in the continuous playing.



The player skips the undesired selection to play the next one.

When play ends
Selections except deleted ones will be restored.

To play again
Press ►. Delete play starts.

To put back a selection which you have deleted, press the numeric button for that selection. "on" will be displayed in the window.

To put back all selections which you have deleted, press ■ during stop.

If you press SHUFFLE during delete play, your selections will be played in the delete shuffle play mode.

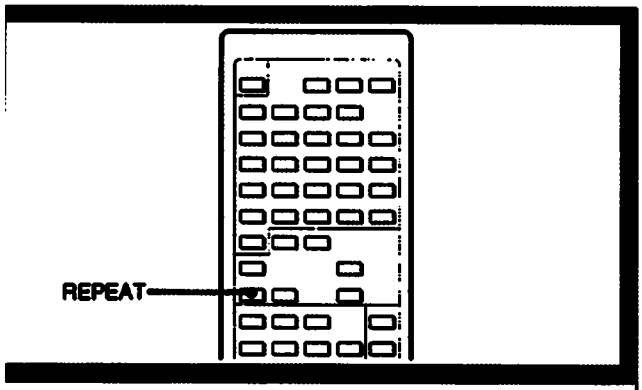
For a disc with selections more than 24
The remaining time of the disc as a whole appear as "----".

Delete bank function.
You can keep the desired selections in memory for each disc by using the delete bank function. (page 26).

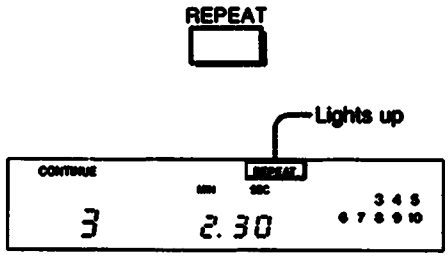
Playing Repeatedly – Repeat Play

epeat play: Allows you to repeatedly play all selections or one particular selection on your disc in any play mode.
.–B repeat play: Allows you to repeatedly play a particular portion (starting with point A and ending with point B) on your disc. Useful for learning foreign languages or lyric lines.

Repeating Selections



Press REPEAT before or during play.



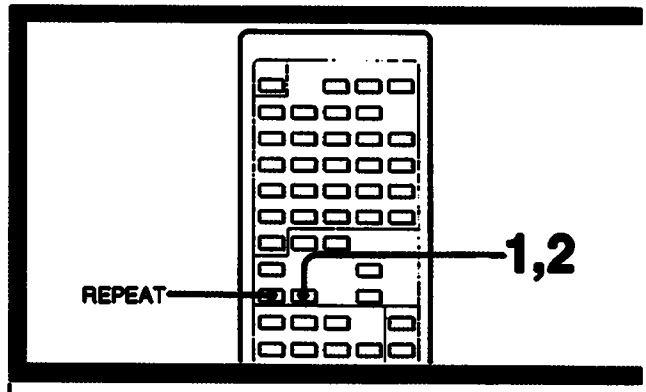
he player repeats the current playing mode.

Playing mode	Selections to be repeated
Continuous play	All the selections or a single selection
Delete play	Repeat playing selections except deleted ones
Shuffle play Delete shuffle play	Selections that the player reshuffles
Program play	All the selections programmed in the same order
Custom index play	Between the specific custom indexes

o repeat a single selection
ress REPEAT again during repeat play of the continuous delete playing mode. "REPEAT 1" appears.

o cancel repeat play
ress REPEAT again. "REPEAT" disappears. To cancel peat play of the continuous play (or delete play), press EPEAT until "REPEAT" disappears.

Repeating a Particular Portion – A – B Repeat



1 **Press A↔B at the starting point (point A) of the portion to be repeatedly played.**

"A-" blinks in the window.

2 **Either continue playing the portion or press ▶▶ to reach the ending point (point B) of the portion and then press A↔B again.**

"REPEAT A – B" appears.
The player memorizes the ending point (point B) and repeat play the specified portion starts.

To set a new starting point
Press A↔B repeat during play in the A – B repeat mode. The ending point (B) becomes the new starting point (A) and play is continued.
To designate the new ending point (B), press A↔B repeat again at your desired place.
The new A – B repeat portion is set.
You can advance the portion by repeating the above operation.

To cancel A – B repeat
Press REPEAT.

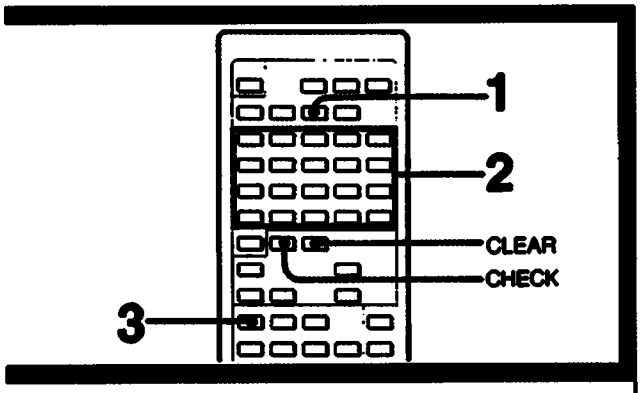
Going back to the same point (A) from any point on the disc
Press A↔B to designate the desired point (A). (Point B need not be designated.)
You can go back to point A from any point on the disc by simply pressing ▶.

Note
You cannot designate point A and B in two different selections.

Playing in a Desired Order – Program Play

rogram play allows you to play up to 24 programmed selections in the order in hich they are programmed. This section shows the basic method of programming lections. For the method of programming selections to be recorded on your ipe, see page 21.

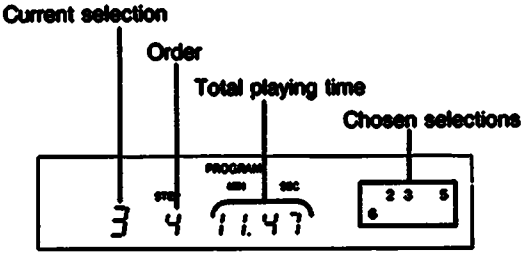
Programming and Playing



1 **Press PROGRAM.**

"PROGRAM" appears in the window.
When using the PLAY MODE button on the player, press it until "PROGRAM" appears.

2 **Press selection number in the desired order.***



If you choose wrong selections, press CLEAR.
Each time you press CLEAR, the last chosen selection will be deleted.

*To choose a selection over 20, see page 14.

3 **Press ▶.**

The indicator above the ▶ button lights, and then program play starts.

To stop playing
Press ■.
You can play the same program repeatedly as long as you do not cancel program play or erase the program.

To cancel program play
Press CONTINUE and return to the continuous playing mode.
The program will be erased.

To check your program
Press CHECK and the first selection in the program will be displayed.
Each time you press CHECK, the next selection in the program will be displayed. When CHECK is pressed after the last selection, "ξ∩♂" appears and then the display returns to the initial display.

To Change Your Program

To erase the last selection, press CLEAR.
Each time you press CLEAR, the last selection in the program will be erased.

To add a selection to the end of the program, just press the numeric button for that selection. You can also add selections during play or stop.
You cannot program a pause during play.

To delete a selection, press CHECK repeatedly until the undesired selection is displayed. Then press CLEAR.

To change the order, press ■ during stop to erase the program. Then repeat the programming procedure from the beginning.

The blank spaces between selections during the program playing.
Te blank spaces are automatically set to 1 second. Therefore, if you program the continuous selections of a disc (e.g., programming selections 4 and 5 continuously), the blank spaces remain in their original condition.

When the power is turned off while playing a program selection
The program is erased.

When pressing PROGRAM during playing
The current playing selection will be the first one.
You can program while playing.

If "- - - -" is displayed instead of the actual time
– You have programmed a selection number over 24.
– The total time is exceeded 100 minutes.

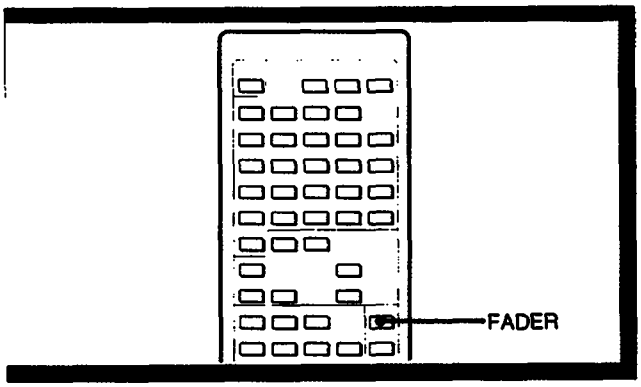
To check the remaining time in the program play
Press TIME once to see the remaining time of the selection being played; twice to see the total remaining time; once more to return to the initial display.
If you have inserted a pause, the display shows the total remaining time until the pause.

Program bank function
You can have the player memorize programmed selections for each disc.
(page 25)

Fading in And Fading out Play – Fade-in/Fade-out

ade-in and fade-out allow you to record selections on your tape in such a manner
ıat their play may not start and stop suddenly. You can have the play fade out
etween 2-10 seconds. When no time is specified, the play will fade in and fade
ut for 5 seconds. This function cannot be operated when the DIGITAL OUT is
sed for connections.

Fading in/Fading out

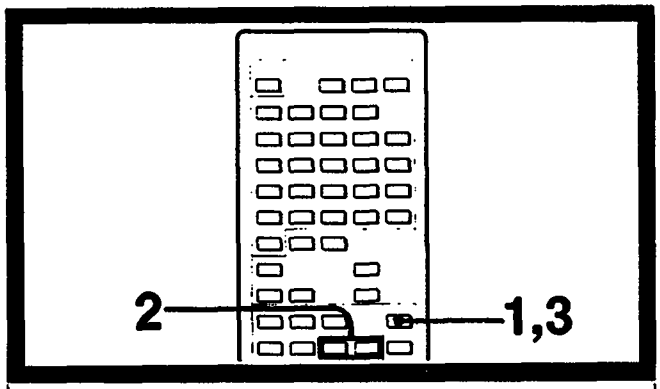


o end the play fading out
ress FADER when you want to start fading out.
he indicator above the ▮▮ button blinks, and play fades
ıt and enters the pause mode.

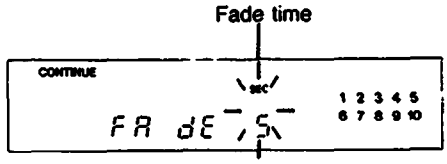
o restart the play fading in
ress FADER in the pause mode.
he indicator above the ▮▮ button blinks, and play fades in.

ing custom file function
ıe last designated fade time also remains for the discs with custom files.

To Set the Fade Time



1 Press FADER during stop.



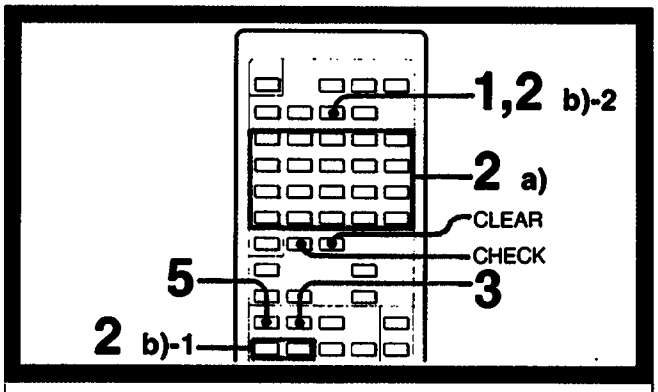
2 Press ◀◀/▶▶ to select fade time between 2-10 seconds.

3 Press FADER.

Recording Programmed Selections on a Tape

You can program up to 24 selections in a desired order according to the length of your tape on which they are to be recorded. You can also program selections to be recorded on side A simultaneously with those to be recorded on side B on your tape.

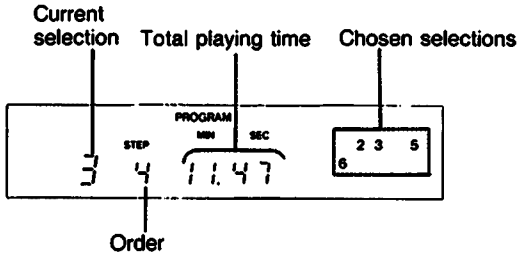
Programming and Playing



1 Press PROGRAM.

"PROGRAM" appears in the window.
When using the PLAY MODE button on the player, press it until "PROGRAM" appears.

2 a) Press selection number in the desired order.*

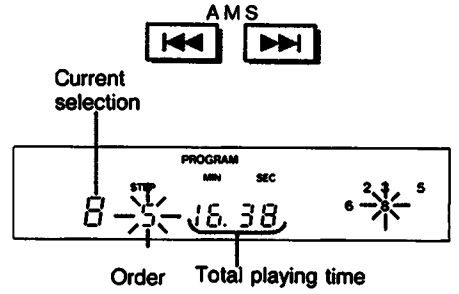


If you choose wrong selections, press CLEAR. Each time you press CLEAR, the last chosen selection will be deleted.

*To choose a selection number over 20, see page 14.

b) To program selections while checking the total playing time (Program Edit):

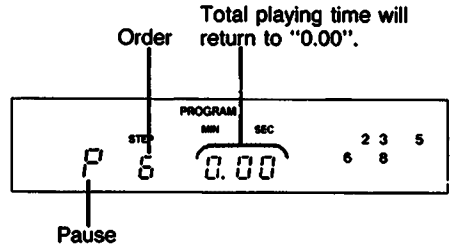
1 Press ⏮/⏭ instead of the numeric buttons to choose selections to be programmed.



Press ⏮/⏭ repeatedly to choose an appropriate selection.

2 After choosing the selections to be programmed, press PROGRAM.

3 If you program selections on side B, press ⏸ to program a pause.



The pause is programmed as the sixth selection. Note that the player counts pauses as selections to be programmed.

(to be continued)

Recording Programmed Selections on a Tape

4 **Program the selections for side B.**
Repeat step 2.

5 **Press ►.**

To play the selections for side B
When the selections for side A are played, the player will pause. Set the tape to the beginning of side B, then press ► or ❚❚.

To stop playing
Press ■.
You can play the same program repeatedly as long as you do not cancel program play or erase the program.

To cancel program play
Press CONTINUE and return to the continuous playing mode.
The program will be erased.

To erase the entire program
Press ■ once during stop; twice during play.
The program is also erased when you turn off the player.

To check your program
Press CHECK the first selection in the program will be displayed.
Each time you press CHECK, the next selection in the program will be displayed. When CHECK is pressed after the last selection, "– End –" appears for 1 second and then the display returns to the initial display.

To Change Your Program

For operation, see page 18.

The blank spaces between selections during the program playing.
The blank spaces are automatically set to 1 second. Therefore, if you program the continuous selections of a disc (e.g., programming selections 4 and 5 continuously), the blank spaces remain in their original condition.

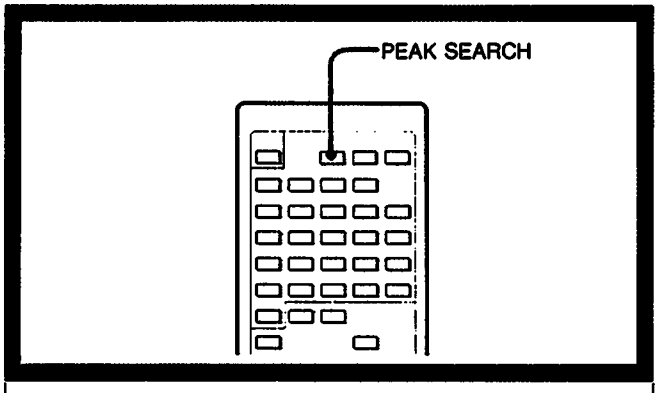
If "– – – –" is displayed instead of the actual time
– You have programmed a selection number over 24.
– The total time is exceeded 100 minutes.

To check the remaining time
Press TIME once to see the remaining time of the selection being played; twice to see the total remaining time; once more to return to the initial display.
If you have inserted a pause, the display shows the total remaining time until the pause.

Your program is erased when:
- You change the continuous play mode.
- You turn off the power during program play.
- Press ■ once during stop, twice during play.

Locating the Loudest Portion of the Disc
– Peak Search

The player will search the loudest portion (peak level) of the disc, and then play it repeatedly. This function will make it easier for you to adjust to the optimum level when recording on tape.



Press PEAK SEARCH in the stop mode.

"PEAK" blinks in the window. The loudest portion will be playing repeatedly for 4 seconds.
At this time, adjust the recording level.

Note
In the delete play, delete shuffle play, or program play mode, when a single disc is inserted in the player, selections chosen from that disc will be searched for a peak.

To stop peak search
Press ■. Press ❚❚ to pause at the first selection.
"PEAK" will disappear in the display window.

To start play immediately
Press ▶.

Note on peak search function
The player determines the loudest portion (peak level) of a disc by searching it at fixed intervals. As a result, the portion searched may differ from the actual peak level. In addition, this function may determine different portions as the peak level for the same disc. However, the difference between the portion searched and the actual peak level is insignificant and will not present any problem in adjusting the recording level.

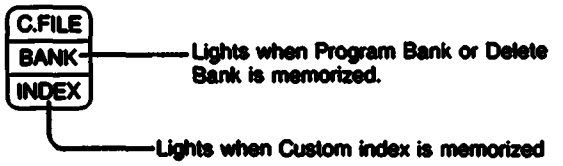
Custom Files

The CD player incorporates a memory in which you can store three types of informations called "custom files".

Three Custom Files

Program bank	A programmed playing order you store in memory for a disc, so that the disc can be played always in the fixed order. (page 25)
Delete bank	You can store certain selections in memory so that the player will always play only desired selections. (page 26)
Custom Index	You can assign up to 10 index points on anywhere you want on a disc. (page 27)

What is this indication?



Custom File Last Mode Memory
The last play mode (current play mode, and fade time) of a disc containing custom file will be retained in the player's memory when the disc is removed from the player. When the disc is inserted again, the last play mode will be recalled. However, if you press ▶ while the disc tray is open, the current play mode will take priority over the last play mode memorized.

Where are custom files memorized?
Custom files are memorized not in the disc but in the player's memory. So you can't enjoy custom files with the other players without memorizing custom files again. Custom files are retained for approximately 1 month without AC power supply.

How many discs can be assigned to custom files?
You can give custom files to up to 185 discs. But one disc is counted as two discs when the following custom files are stored simultaneously:
- A disc with a custom index and a program bank (or a delete bank) is counted as 2 discs.

When the memory becomes full of custom files.
"FULL" indication appears when FILE is pressed while no custom file can be memorized for the disc currently put in the player. To make a custom file for the disc, clear the custom file of another disc.

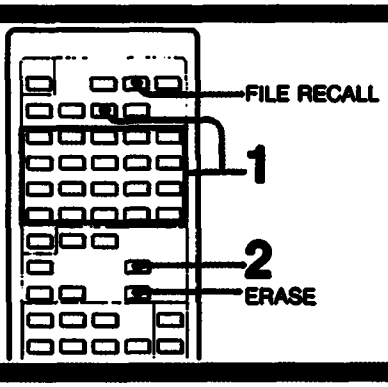
To clear custom files or to reset memory of all discs at once
Press POWER button to turn on the player while keeping DISPLAY MODE button and OPEN/CLOSE button pressed. "AL clr" is displayed in the window.

Note on program bank
A single disc cannot be assigned with both a program bank and a delete bank.

Keeping the Program in Memory – Program Bank

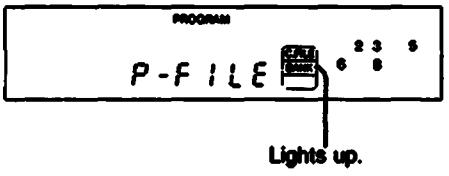
After programming selections, you can keep the program memorized, so that the disc is played always in the fixed order. The memorized program is called "program bank". One program bank can be made for a disc.

Memorizing Program



1 Program the selections (page 18 or 21).

2 Press FILE.



When "BANK" lights, the program is memorized for the program bank.

To change the program bank
Program the selections again and press FILE.

Where is the program bank memorized?
The program bank is memorized in the player's memory. Therefore, if a disc for which you made a program bank is used with another player, play using the program bank is not possible.

Playing the Disc Using the Program Bank

Before inserting a disc

1 Press PROGRAM.
"PROGRAM" appears in the window.

2 Insert the disc in the tray.

3 Press ►.

When the disc is in the tray

1 Press FILE RECALL during stop.
"PROGRAM" appears in the window and the memorized program will be recalled.

2 Press ►.

To play the selections in another program without clearing the program bank
Insert the disc in the tray, press PROGRAM to program the selections as you want, and press ►. The disc will be played in the newly programmed order. The memorized program bank won't be cleared. (Press FILE RECALL to check the program bank.)

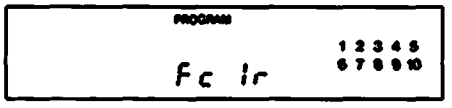
To play a disc having a program bank in other modes
Insert the disc in the tray, set the player in the desired play mode and press ►.

Clearing the Program Bank

1 Insert the disc whose program bank is to be cleared in the tray.

2 Press FILE RECALL.

3 Press ERASE.

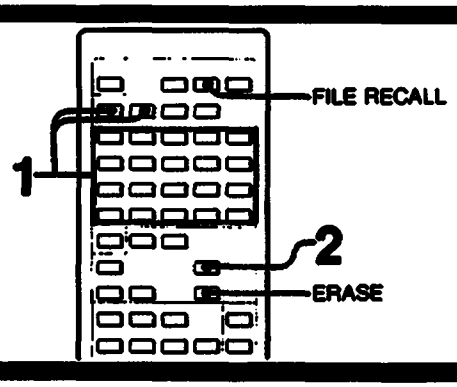


When "Fclr" is displayed and "BANK" disappears, the program bank is cleared.

Keeping Your Undesired Selections in Memory
– Delete Bank

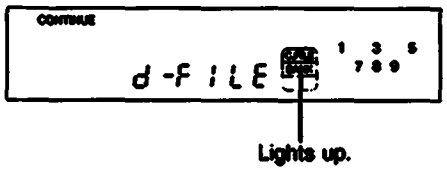
fter choosing undesired selections, you can store them in the memory. These
emorized desired selections are called "Delete Bank".
ne delete bank can be made for each disc. Note that both program bank and
lete banks cannot be made for one disc.

Memorizing Undesired Selection



1 **Select the undesired selections. (see page 16.)**

2 **Press FILE during stop.**



When "BANK" appears, the undesired selections is memorized for the delete bank.

o change the delete bank
elect the undesired selections again, and press FILE.

te on delete banks
to 99 selections can be specified in the delete bank.
owever, a delete bank will not register if no selections are deleted at all.

here is the delete bank memorized?
e delete bank is memorized in the player's memory.
erefore, if a disc for which you made a delete bank is used with another ayer, play using the delete bank is not possible.

Playing the Disc Using the Delete Bank

Before inserting a disc
1 **Press CONTINUE or SHUFFLE.**

2 **Insert the disc in the tray.**

3 **Press ►.**

When the disc is in the tray
1 **Press CONTINUE or SHUFFLE.**

2 **Press FILE RECALL during stop.**

3 **Press ►.**

To play another desired selections without clearing the delete bank
Insert the disc in the tray, press ■. Select the undesired selections again, and press ►. The disc will be played in the order newly chosen. The memorized delete bank won't be cleared. (Press FILE RECALL to check the delete bank.)

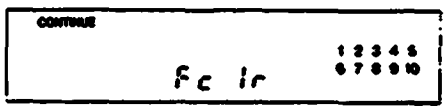
To play a disc having a delete bank in other modes
Insert the disc in the tray, set the player in the desired play mode and press ►.

Clearing the Delete Bank

1 **Insert the disc whose delete bank is to be cleared in the tray.**

2 **Press FILE RECALL.**

3 **Press ERASE.**

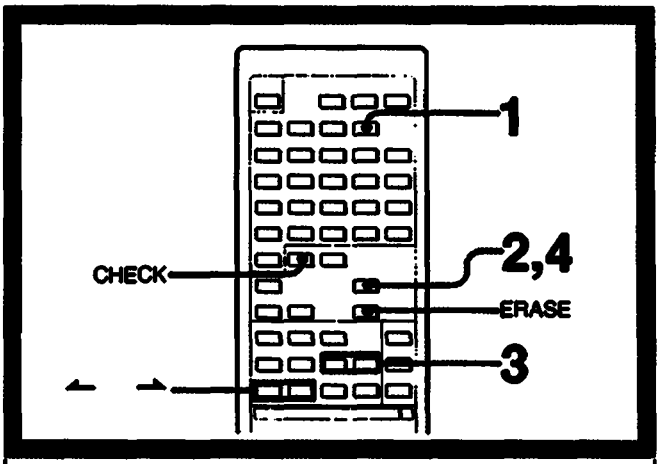


When "Fclr" is displayed and "BANK" disappears, the delete bank is cleared.

Indexing a Disc – Custom Index

A custom index is a special index that can be assigned to any position you want on the disc. If you assign custom indexes to the positions on a disc, you can easily locate the positions during play, or enjoy repeat play between two adjacent custom indexes.

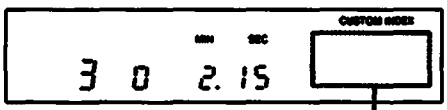
Assigning Indexes to Your Disc



1 **Press C.INDEX during play.**

C.INDEX

"CUSTOM INDEX" appears in the window. When using the PLAY MODE button on the player, press it until "CUSTOM INDEX" appears.



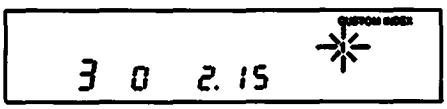
The music calendar disappears.

2 **Press FILE where you want to assign a custom index.**

FILE

The index number blinks

After 1 second.



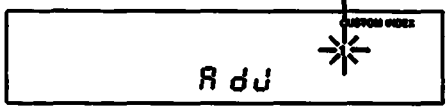
The 3-second portion from the point where you pressed FILE is played repeatedly (rehearsal play).

3 **Adjust the repeat starting point using ◀◀ or ▶▶.**

◀◀ ▶▶

Press ▶▶ to shift the repeat start point forward and ◀◀ to shift it backward. Pressing ◀◀/▶▶ 7 times shifts the point by approximately 1 second.

Blinks



4 **Press FILE to store the custom index. The custom index is assigned to the repeat start point.**

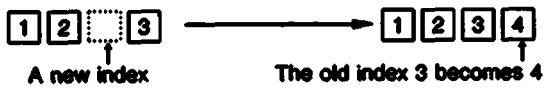
FILE

Lights up.

5 **You can assign custom indexes up to 10 positions by repeating steps from 2 to 4.**

To release rehearsal play
Press CLEAR, to resume normal play.

If a new custom index is assigned to a position preceding another index.
Previously existing indexes will be shifted as follows.
Example: If you assign a new index between 2 and 3.



A new index — The old index 3 becomes 4

During custom index play
You cannot use the normal index search, however, search of custom index function is possible. The current custom index number is displayed inserted of index number.

If you press FILE in the pause mode
The rehearsal play is not made and the custom index is assigned immediately at the position where FILE is pressed.

Indexing a Disc – Custom Index

Playing from the Desired Custom Index

There are three ways to play from a desired custom index.

a) To play from an index to the end of the disc

1 Press C.INDEX.
2 Select the desired custom index by pressing the *corresponding numeric button 1 through 10.*

b) To play from one index to the next index

1 Press C.INDEX twice so that "CUSTOM INDEX" and "SINGLE" are displayed.
2 Select the desired custom index by pressing the corresponding numeric button 1 through 10.

To play repeatedly between adjacent indexes
Press REPEAT between steps 1 and 2 above. To cancel repeat play, press REPEAT again.

c) To access an index during play

1 Press C.INDEX
2 Press ⏮/⏭ on the remote commander.
⏭: Accesses the next index.
⏮: Returns to the preceding index.
(To go further back, use the numeric button.)

To release play using custom indexes
Press one of the PLAY MODE buttons (PROGRAM, SHUFFLE or CONTINUE). The music calendar appears.

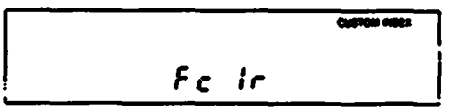
Recommended application of custom indexes
When the selections on your disc are symphonies or concertos, their selection number is not useful for locating their chapters. In this case, you are recommended to assign a custom index to each chapter so that you can locate it easily. When you want to play only one chapter, you are recommended to choose custom index single.

Clearing Custom Indexes

1 Press C.INDEX.
"CUSTOM INDEX" appears in the window.

2 Press CHECK.
Each time you press CHECK, index number blinks.
Select the index number you want to delete.

3 Press ERASE while index number blinks.



The specified index will be erased and the succeeding index numbers will move up one.

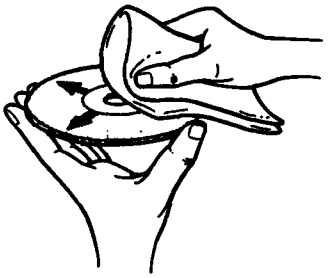
Maintenance

Cleaning Your Player

Clean the cabinet, panel and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

Cleaning Discs

When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out.



Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

Specifications

Compact disc player

Laser	Semiconductor laser (λ=780 nm) Emission duration: continuous
Laser output	Max. 44.6 μW* * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Frequency response	2 Hz – 20 kHz ±0.3 dB
Signal to noise ratio	More than 119 dB
Dynamic range	More than 100 dB
Harmonic distortion	Less than 0.0015%
Channel separation	More than 110 dB

Outputs

LINE OUT (FIXED)	Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms
LINE OUT (VARIABLE)	Output level max. 2 V (at 50 kilohms) Load impedance over 50 kilohms
BALANCED OUT (FIXED)	Output level 2 V (at 50 kilohms) Load impedance over 600 ohms
DIGITAL OUT (COAXIAL)	Output level 0.5 Vp-p (at 75 ohms) Load impedance 75 ohms
DIGITAL OUT (OPTICAL)	Wave length 660 nm Output level −18 dBm
PHONES (stereo phone jack)	Output level max. 100 mW Load impedance 32 ohms

General

Power requirements	120 V AC, 60 Hz
Power consumption	38 W
Dimensions	Approx. 470×125×375 mm (w/h/d) ($18^5/_8$×5×$14^7/_8$ inches) Including projecting parts and controls
Weight	Approx. 16.5 kg (36 lbs 7 oz), net

Remote commander (RM-D995)

Remote control system	Infrared control
Power requirements	3 V DC with two batteries size AA (IEC designation R6)
Dimensions	Approx. 62×18×175 mm (w/h/d) ($2^1/_2$×$^{23}/_{32}$×7 inches)
Weight	135 g (4.8 oz) Including batteries

Supplied accessories

Connecting cord (1)
(2 phono plugs ↔ 2 phono plugs)
Remote commander (1)
Sony SUM-3(NS) batteries (2)
Screw (M4) (8)

Optional accessory

Audio optical connecting cord POC-15
Digital connecting cord VMC-1ES

Design and specifications are subject to change without notice.

Troubleshooting Guide

Before going through the check list below, first refer back to the connections and operating procedures.
Should any problem persist after you have made these checks, consult your nearest Sony service facility.

Symptom	Cause	Remedy
The disc tray does not close.	The disc is not placed correctly.	Place the disc correctly on the disc tray.
Play does not start.	Dirty disc.	Clean the disc.
	The disc is inserted upside down.	Insert the disc with the printed side up.
	The player is in the pause mode.	Press ▮▮ or ▶ to release pause.
	Moisture condensation.	Leave the player turned on for approximately one hour.
Display window does not illuminate even when the power is turned on.	DISPLAY MODE was pressed.	Press the button again.
Sound is not heard.	Loose connection.	Insert the plug firmly.
	Connection is incorrect.	Check the connection refering to Hooking up the System.
	The LINE OUT/PHONE LEVEL control is set to the minimum.	Turn the control clockwise.
	BALANCED output is used for connection, but the BALANCE OUT switch is turned OFF.	Turn the BALANCE OUT switch ON.
Play does not begin from the first selection.	The player is in the PROGRAM, SHUFFLE or C.INDEX mode.	Press CONTINUE.
" ᵀᵀ " is displayed.	▶▶ was continuously pressed at the end of the disc.	Press ◀◀ or ▮◀◀ to return to normal indication.
The remote commander does not operate the player.	The batteries are run down.	Replace both batteries.
	The remote commander is not pointed at the remote sensor.	Point the remote commander at the sensor.
	There is an obstacle between the remote commander and the player.	Remove the obstacle.
	The remote commander is too far from the player.	Move closer.
Any operation is not possible.	The internal control program may not run.	Turn off the power and turn it on again.